



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,221	12/11/2003	Alistair Hamilton	1166 / SYMBP167US	8007
23623	7590	02/24/2006	EXAMINER	
AMIN & TUROCY, LLP 1900 EAST 9TH STREET, NATIONAL CITY CENTER 24TH FLOOR, CLEVELAND, OH 44114			BOATENG, ALEXIS ASIEDUA	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,221

Applicant(s)

HAMILTON ET AL.

Examiner

Alexis Boateng

Art Unit

2838

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/25/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other. \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4, 6 and 8 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is not clear because "the portable unit" in line 5 lacks antecedent basis so that it is not clear if it is the same element as "the portable computing device." There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 9, 11 – 14, 17 – 19, 27 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng (U.S. 2003/0210106).

**Regarding claim 1**, Cheng discloses a portable computing device (figure 1 item 103), comprising: a component that receives an electro-magnetic flux (figure 5 item 800) generated from an external source (figure 5 item 700); and a charging component that generates a charging current from the flux (figure 5 item 700), and charges a rechargeable power supply (paragraph [0029] and [0030]). Cheng discloses in paragraph [0081] and [0163] wherein a control unit is used to control the charging times for devices. Cheng further discloses in paragraph [0163] wherein multiple devices may be charged at different times because “alternate charging” means different times.

**Regarding claim 9**, Cheng discloses in paragraphs [0081] and [0163] wherein each device will be charged with their own respective times. Cheng providing at least one primary induction assembly (figure 3 item 600) with a primary winding (figure 6f item 710, 740) configured to create a magnetic flux; providing a second pick up induction assembly (paragraph [0046]) coupled to a rechargeable power supply (paragraph [0087]) of a portable unit (paragraph [0126] – [0136]); the magnetic flux extendable in to the second pick up induction assembly (paragraph [0086]); and opportunistically recharging the power supply via a current created in the second induction assembly from the magnetic flux (paragraph [0205]).

**Regarding claim 11**, Cheng discloses the method of immediately recharging the power supply, when the magnetic flux extends in to the second pick up assembly (paragraph [0205]).

**Regarding claim 12**, Cheng discloses providing a controlling at least one of the primary induction and the secondary induction assembly (figure 5 item 770).

**Regarding claim 13**, Cheng discloses triggering an event to energize the primary winding (paragraph [0086]).

**Regarding claim 14**, Cheng discloses the trigger further comprising varying a light feature (paragraph [0107]).

**Regarding claim 17**, Cheng discloses aligning the second induction assembly in close spatial proximity to the first induction assembly (abstract and paragraph [0071]).

**Regarding claim 18**, Cheng discloses carrying the first induction assembly by a member of a group; and approaching the member when an opportunistic recharge is required for portable units of other members (paragraphs [0090] – [0102] and [0073]).

**Regarding claim 19**, Cheng discloses a charging system for a portable unit comprising: a controller that determines a charging time for a rechargeable power source of the portable unit and allocates a partial charge time to the rechargeable power source (paragraph [0081]); a primary induction assembly (paragraph [0046]) with a primary coil (figure 6f item 710, 740) coupled to a primary power source (figure 5 item 760); and a secondary induction assembly

with a secondary coil coupled to a rechargeable power source (paragraph [0087]) of the portable unit; the magnetic flux of the first primary induction assembly extendable to the secondary induction assembly (paragraph [0086]) so as to provide the rechargeable power source a charging current that is inductively created via the magnetic flux during an opportunistic charging of the portable unit (paragraph [0205]).

**Regarding claim 27**, Cheng discloses wherein the primary induction assembly is part of a flat pad (paragraph [0091]).

**Regarding claim 29**, Cheng disclose a means for allocating disparate charge times (paragraph [0081]) to at least two portable units (paragraph [0073]); means for creating a magnetic flux (figure 4c: paragraph [0182]); and means for receiving a magnetic flux, the receiving means operatively connected to a rechargeable power source of each of the at least two portable units so as to create an electric current during an opportunistic charge of the at least to portable units (paragraph [0087]).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Kaite (U.S. 6,016,046).

**Regarding claim 6,** Cheng does not disclose the invention as claimed. Kaite discloses in column 4 lines 55 thru 56 the rechargeable power source being at least one of a fuel cell, a capacitor, a super capacitor, and a rechargeable battery cell. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Cheng system with the Kaite system so that power source can be effectively recharged.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Kaite (U.S. 6,016,046) as applied to claim 1 above and in further view of Ishii (U.S. 5,070,293).

**Regarding claim 2,** neither Kaite nor Cheng discloses wherein the portable computing device of claim 1 further comprises a bar code scanner. Ishii discloses in the abstract wherein the portable device is a bar code scanner. At the time of invention, it would have been obvious to a person of ordinary skill in the art to make the portable device comprise a bar code scanner so that it the scanner is mobile which makes it easier to scan a wide range of materials.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Kaite (U.S. 6,016,046) as applied to claim 1 above and in further view of Burton (U.S. 6,917,182).

**Regarding claim 3,** neither Kaite nor Cheng discloses wherein the portable computing device comprises an artificial intelligence (AI) component that infers

and/or determines when the power supply should be recharged. Burton discloses in column 5 lines 65 thru column 6 line 11 wherein microprocessor 262 is used to control when the device should be charged. At the time of invention, it would have been obvious to a person of ordinary skill to implement an artificial intelligence component to determine when charging is necessary so that the device is prevented from completely being harmfully discharged.

7. Claims 4, 8 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Kaite (U.S. 6,016,046) as applied to claim 1 in view of Kodama (U.S. 5,805,998).

**Regarding claims 4, 8 and 26,** Neither Cheng nor Kaite disclose wherein the portable computing device comprises a notification component that notifies the user that the device should be exposed to the external flux source. Kodama discloses in figure 5 and in column 9 line 66 thru column 10 line 16 where when the voltage drops below a predetermined level, an LED in the portable device turns on to notify the user of a low battery voltage. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement a notification device of when the battery needs to be charged so that it the user can recharge the battery when it is at a low voltage.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Goto (U.S. 5,600,225).

**Regarding claim 10,** Cheng does not disclose the invention as claimed. Goto discloses a method of opportunistically recharging the power supply without



deactivating the portable unit (column 4 lines 49 through 67). At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Cheng system with the Goto system so that the devices are usable continuously while being charged.

9. Claims 15, 16, and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Lew (U.S. 6,608,464).

**Regarding claims 15, 16 and 22,** Cheng does not disclose wherein the sensor is at least one of a motion and a light sensor. Lew discloses in column 7 lines 20 thru 50 wherein solar cells are used to sense light and a motion trigger is used to generate a magnetic field thru the coils. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement the sensor as a motion and/or a light sensor that the charging can be manifested in different manners when a standard power source is unavailable.

10. Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Fernandez (U.S. 6,184,651).

**Regarding claim 20,** Cheng does not disclose wherein the charging system comprises a controller in wireless communication with the portable unit for monitoring a state of charge of the rechargeable power source. Fernandez discloses in figure 2 item 11 wherein the primary controller uses wireless feedback of control signaling. At the time of invention, it would have been obvious to a person of ordinary skill in the art to use wireless communication

because the user does not have to worry about wires becoming worn out or damaged.

11. Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Kaite (U.S. 6,016,046).

**Regarding claim 21,** Cheng does not disclose wherein the controller comprises a sensor. Kaite discloses in figure 2 item 125 wherein a current sensing section is comprised within the controlling circuit. At the time of invention, it would have been obvious to a person of ordinary skill in the art, to implement a sensor in the controlling circuit of the system so that the circuit can sense different changes in the system and effectively regulate the process of charging and discharging within the system to prevent damages.

**Regarding claim 23,** Cheng does not disclose wherein the rechargeable power source is at least one of a fuel cell, a capacitor, and a rechargeable battery cell. Kaite discloses in column 4 lines 55 thru 56 wherein a rechargeable battery cell is used. At the time of invention, it would have obvious to a person of ordinary skill in the art to use a fuel cell, a capacitor or a rechargeable battery cell for the system because they provide a more efficient manner in saving and supplying power to devices.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Lappi (U.S. 6,114,832).

**Regarding claim 25,** Cheng does not disclose wherein at least one of the portable unit and the charger system is wearable around a user's body. Lappi

Art Unit: 2838

discloses in figure 1 item 100 where the charger system is wearable around a user's body. At the time of invention, it would have been obvious to a person of ordinary skill in the art to make the portable unit or the charger wearable to the user so that it is easier and more convenient to charge the portable unit.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (U.S. 2003/0210106) in view of Lappi (U.S. 6,114,832) as applied to claim 25 above and in further view of Utsunomiya (U.S. 6,327,127)

**Regarding claim 28,** Neither Cheng nor Lappi disclose where a thermo-coupler is connected to a user's body for additionally recharging at least one of the primary power source and the rechargeable power source. Utsunomiya discloses in column 6 lines 5 through 14, wherein the body temperature from the user is used to generate an electric current to recharge the battery in the device. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement a thermocouple device to recharge the battery so that when a standard power source, such as an AC current, is unavailable, the user's body temperature can be used continuously.

### ***Response to Arguments***

14. Applicant's arguments with respect to claims 1, 6, 9- 13, 17- 19, and 29 have been considered but are moot in view of the new ground(s) of rejection. Please see above statements.

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

  
**KARL EASTHOM**  
**SUPERVISORY PATENT EXAMINER**